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Hankey, Maren; Williams, Natalie A.; and Dev, Dipti A., "Uninvolved Maternal Feeding Style Moderates the Association of Emotional Overeating to Preschoolers' Body Mass Index z-Scores" (2016). *Faculty Publications, Department of Child, Youth, and Family Studies*. 134.

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Uninvolved Maternal Feeding Style Moderates the Association of Emotional Overeating to Preschoolers' Body Mass Index z-Scores

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Abstract

Objective: To examine the relation between preschoolers' eating behaviors and body mass index (BMI) z-scores (BMIZ) and the moderating role of permissive parent feeding styles in these associations.

Design: Cross-sectional study involving mothers' report of food-related parenting styles and child eating behaviors.

Setting: Small city in southern Mississippi.

Participants: Mother–preschooler dyads ($n = 104$).

Main Outcome Measure: Child body BMIZ.

Analysis: Moderated multiple regression.

Results: An uninvolved feeding style moderated the relationship between emotional eating and BMIZ such that children with higher emotional overeating scores had higher a BMIZ in the presence of an uninvolved feeding style ($B = 2.16$; $P = .01$).

Conclusions and Implications: An uninvolved feeding style may be a risk factor for higher BMIZ in preschoolers who tend to overeat to cope with negative emotions. For other children in this population, self-regulatory aspects of eating may be more important than mothers' feeding style in the maintenance of healthy weight.

Keywords: eating behavior, feeding styles, child, body mass index, overeating

Introduction

Maintaining a healthy weight during the first years of life is paramount for obesity prevention during early childhood and beyond.^{1,2} Individual variations in stylistic aspects of children's eating behaviors can be observed in early childhood and are linked to children's weight outcomes.³ For example, compared with their healthy-weight peers, obese children have been found to be less effective at regulating their food consumption, to demonstrate lower responsiveness to internal cues of hunger and fullness and higher responsiveness to external food cues,⁴⁻⁶ and to be more likely to overeat in response to negative emotions.^{7,8}

Little research has tested moderating variables in the association of children's eating behaviors such as satiety responsiveness, food responsiveness, and emotional eating to weight-related outcomes. One potential moderator is parent feeding style, or the feeding-related attitudes and approaches that characterize how parents generally interact with their child

regarding food and eating.⁹ Similar to Baumrind's^{10,11} original conceptualization of general parenting style,¹² parent feeding style was assessed using levels of demandingness and responsiveness within the food environment to categorize parents as having an authoritative, authoritarian, indulgent, or uninvolved feeding style.⁹ The authoritative feeding style was characterized by parental involvement, nurturance, reasoning, and structure. The authoritarian style included high levels of restrictive, punitive, rejecting, and power-assertive behaviors in the feeding environment. The indulgent style was characterized by warmth and acceptance of child food preferences in conjunction with low levels of monitoring the child's eating behaviors and making few demands. Finally, the uninvolved style involved both low levels of control or involvement and low levels of warmth and acceptance of the child in the food environment.

There is some evidence that parent feeding style plays a role in children's weight outcomes. Both the indulgent and uninvolved styles were associated with higher child body mass

index (BMI) z-scores,^{9,13-17} and indulgent feeding was found to predict an increased risk of children becoming overweight (i.e., having an age- and sex-specific BMI between the 85th and 94th percentiles).¹⁸ Children of parents with an uninvolved feeding style were also found to have the most energy-dense diets compared with children of parents with other feeding styles, and to consume lower levels of fruits, vegetables, and dairy products.¹⁷ These findings suggested that parental permissiveness in the feeding context, characterized by low levels of parental control and low involvement in children's eating, may be a risk factor for childhood obesity when demonstrated consistently across time and situation.

This study addressed a research gap by examining whether permissive parent feeding styles (i.e., indulgent and uninvolved) interact with child eating behaviors to predict preschoolers' BMI z-scores. Conceptually, children with a reduced capacity for self-regulation in eating or a tendency to overeat in response to negative emotions may have a higher BMI z-score when parents allow them to determine the types and amounts of foods consumed (i.e., permissive feeding style) than when parents provide an appropriate structure to help children to regulate their food intake (i.e., authoritative feeding style). It was hypothesized that lower child satiety responsiveness and higher food responsiveness, food enjoyment, and emotional overeating would predict higher BMI z-scores; however, these associations were predicted to be stronger among children whose parents were characterized as having an indulgent or uninvolved feeding style compared with an authoritative feeding style.

Methods

Participants and Procedures

Participants included 104 mothers and their 3- to 5-year-old children residing in and around a small city in south Mississippi (population of 50,000). Participants were recruited using study advertisements distributed through 8 local preschool programs and posted in the community. Eligibility criteria specified that participants were at least aged 18 years and were the parent and primary caregiver of a child aged 3-5 years. No exclusions were made based on race or ethnicity, pregnancy status, number of children in the family, or parental status (i.e., adoptive vs biological mother or father). If a participant had more than 1 child within the targeted age range, he or she was asked to report on the child whose birthday came first in the calendar year. Participants recruited from preschools attended a data collection session at the child's preschool, where they completed study questionnaires and trained research assistants obtained height and weight measurements. Participants who contacted the researchers after seeing a posted advertisement completed the study in a campus research laboratory. In appreciation for their time, participants received a gift card valued at \$20.00. This study was reviewed and approved by the Institutional Review Board at the University of Southern Mississippi, where the research was conducted. Informed consent was obtained from all parents before data were collected.

Measures

Feeding styles. The Caregiver's Feeding Styles Questionnaire is a 19-item measure used to determine parent feeding style.⁹ A 5-point Likert scale ranging from never to always measures the extent to which parents use certain strategies with their child (egg, begging their child to eat or allowing their child to choose their own foods) in the context of feeding. The measure yields scores on 2 dimensions: demandingness and responsiveness. Across-classification of scores using median splits on these 2 dimensions categorizes parents into 1 of 4 feeding categories: authoritative, authoritarian, indulgent, or uninvolved. Previous research using the Caregiver's Feeding Styles Questionnaire provides evidence of test-retest reliability, internal consistency, convergent validity, and predictive validity.^{9,13,14}

Child eating behaviors. The Child Eating Behavior Questionnaire (CEBQ) is a multidimensional parent-report questionnaire measuring eating behaviors in children aged 2-7 years.¹⁹ The CEBQ is composed of 35 items assessing 8 aspects of eating behavior. Subscales included in the current study were food responsiveness (e.g., frequently asking for food, eating in the absence of hunger; 5 items), enjoyment of food (i.e., interest in food and overall positive reactions to food; 4 items), satiety responsiveness (i.e., the degree to which a child refrains from eating based on perceived fullness; 9 items), and emotional overeating (e.g., eating more when feeling worried; 4 items). For each item, a Likert scale is used to rate the frequency of various behaviors (ranging from never to always). The CEBQ shows adequate test-retest reliability and has acceptable internal reliability, with Cronbach α for scales ranging from .74 to .91.¹⁹

Anthropometrics. Height and weight measurements for mothers and children (when present) were obtained to the first decimal place using a Detecto SlimPRO low-profile health care scale (Webb City, Missouri) and a Seca 213 stadiometer (Hamburg, Germany). Participants were measured in their street clothes after removing their shoes and bulky clothing. A continuous BMI variable was calculated as kilograms per square meter. In some cases, the preschooler could not be present during data collection ($n = 26$; 25% of the total sample). In these cases, child BMI was based on weight and height provided by mothers, who were asked before data collection to weigh and measure the child at home. This strategy has been shown to improve the validity of parent-reported estimates of children's height and weight.²⁰ Child BMI z-scores were determined using the Centers for Disease Control and Prevention's SAS macro (Atlanta, GA) with the 2000 age- and sex-specific child growth charts using the child's height, weight, gender, and age in months.²¹

Data Analysis

SAS (version 9.3) was used to conduct all statistical analyses. An a priori statistical power analysis was performed for sample size estimation using GPower3.1.²² With $\alpha = .05$ and power = 0.80, the projected sample size needed to detect an medium effect size of .30 for a linear multiple regression test with 9 predictors was $N = 98$. Preliminary analyses included data

screening to identify outliers and confirm that continuous variables adhered to a normal distribution.²³ Examination of the descriptive statistics for continuous variables identified an outlier for BMI z-score (value of -6.97). For this case, the BMI z-score was calculated based on the child's measured height and weight values, which were recorded twice to check their accuracy. As such, the case was retained and score alteration was used to reduce the outlier's influence. Following established procedures,²³ a value that was 1 unit smaller than the next most extreme BMI z-score in the distribution was assigned to the outlier. This approach ensured that the outlier's value remained deviant within the sample distribution, but not as deviant as it was previously (i.e., -6.97 vs -5.05). Values for skewness and kurtosis, as well as results of tests for normality (i.e., Shapiro-Wilk test), were examined to ensure that the continuous study variables adhered to a normal distribution. All values were within acceptable ranges to infer normality.

The significance level required to reject the null hypotheses was set at $P < .05$ for all analyses. *t* tests and chi-square analyses examined whether participants with reported child height and weight ($n = 26$) differed from participants with measured child height and weight ($n = 78$) on demographic variables, parent and child BMI, parent feeding style, and child eating behaviors. Before the researchers examined the multivariate associations of child eating behavior and parent feeding style to child BMI z-scores, they evaluated the bivariate associations among study variables to identify potentially confounding variables. Demographic variables were recoded owing to small numbers of mothers within some categories, as follows: maternal race/ethnicity (0 = white/Caucasian; 1 = minority race/ethnicity), marital status (0 = single/ never married, legally

separated, divorced, or widowed; 1 = married), maternal educational attainment (0 = less than high school, high school diploma, or some college; 1 = college degree, some graduate school, or graduate degree), and total family income (0 = $< \$10,000$ – $49,999$; 1 = $> \$50,000$). Maternal race/ethnicity, maternal BMI, and child sex were significantly associated with the dependent and/or independent variables (Table 1) and consequently were included as covariates in regression analyses predicting satiety responsiveness, food enjoyment, food responsiveness, and emotional overeating.

The moderating roles of indulgent and uninvolved feeding styles in the association of child eating behaviors to child BMI z-scores were tested in a regression framework using the PROCESS macro (version 2.11), which is based on ordinary least squares regression.²⁴ Owing to sample size considerations, the researchers estimated regression models for satiety responsiveness, food responsiveness, food enjoyment, and emotional overeating separately. For these regression analyses, the 4-level categorical feeding style variable was dummy coded using the authoritative feeding style as the comparison group, consistent with a prior study testing the moderating effects of parent feeding style.²⁵ This procedure yielded 3 separate indicator variables representing (1) authoritarian vs authoritative, (2) indulgent vs authoritative, and (3) uninvolved vs authoritative. These 3 indicator variables were included as independent variables in the regression models, along with the covariates (i.e., maternal BMI, race/ethnicity, and child sex). In PROCESS, predictor variables are centered before computing interaction terms, and *post hoc* probing for significant interaction effects is automatically conducted by estimating the conditional effect of the independent variable at the 2 levels of a

Table 1. Correlations Among Participants' Characteristics, Child Eating Behaviors, and Parent Feeding Styles

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Maternal ethnicity ^a	–												
2. Maternal BMI	–.25	–											
3. Child sex ^b	.04	–.36***	–										
4. Child age	.16	–.13	–.01										
5. Child BMI z-score	–.13	.23*	–.16	–.06	–								
6. Satiety responsiveness	–.06	–.02	–.03	–.13	–.20*	–							
7. Food responsiveness	–.08	.01	–.06	.00	.22*	–.13	–						
8. Enjoyment of food	–.09	–.11	.07	.10	.20*	–.51****	.50****	–					
9. Emotional overeating	.00	–.24*	.28**	.05	.03	.02	.30*	.04	–				
10. Authoritative ^c	.19*	–.02	–.21*	.16	.00	.27**	.04	–.30**	.22*	–			
11. Authoritarian ^c	–.17	.09	–.11	–.15	.05	.02	–.09	–.10	–.11	–.35***	–		
12. Indulgent ^c	–.08	–.06	.27**	–.16	–.02	–.06	–.16	.22*	–.12	–.44***	–.27**	–	
13. Uninvolved ^c	.02	.06	.06	.13	–.03	–.28**	.21*	.23*	–.03	–.38****	–.23*	–.30**	–

BMI indicates body mass index.

Point biserial correlations are reported for associations between binary and continuous variables. a: 0 = non-white, 1 = white; b: 0 = male, 1 = female; c: Coded 0 = no and 1 = yes to examine the bivariate correlations involving the 4 feeding styles;

* $P < .05$; ** $P < .01$; *** $P < .001$; **** $P < .0001$

dichotomous moderator (i.e., 0 or 1). Thus, significant moderation effects are probed by examining the effect of child eating behavior on child BMI z-scores in the presence of the indulgent and uninvolved feeding styles.

Results

Group comparisons revealed that on average, children with parent-reported heights and weights were older than children with measured height and weight ($t[102] = 2.59$; $P < .05$; 4.1 vs 3.7 years). No other significant group differences were observed. Because the observed child age difference was unlikely to influence results for the main study analyses, the full sample ($n = 104$) was retained to preserve power. Table 2 lists descriptive characteristics. Mothers were primarily white (89%), married (89%), and well-educated (74% had at least a college degree), mean age 32.7 years (SD, 4.5 years). Mean BMI for mothers was 26.6 kg/m² (SD, 7.2 kg/m²; range, 17.5–51.6 kg/m²); 46.2% of mothers were overweight or obese. Preschoolers' mean age was 3.8 years (SD = 0.7 years). Approximately equal numbers of boys and girls participated (51% female). The majority of preschoolers were within the healthy weight range (69.2%) but 20.2% were overweight or obese based on their BMI-for-age value.

Table 3 summarizes results of multiple regression analyses conducted to examine the relationship of child eating behaviors, feeding style, and the interaction between eating behaviors and indulgent and uninvolved feeding styles to child BMI z-scores. After controlling for the effects of height and weight measured at home vs at site, child sex, maternal race/ethnicity, and maternal BMI, 3 significant main effects were observed. Higher child BMI z-scores were associated with lower levels of satiety responsiveness ($B = -.78$; $P < .05$), higher levels of food enjoyment ($B = .62$; $P < .01$), and higher levels of food responsiveness ($B = .49$; $P < .05$). No significant main effects were found for feeding style. In all models, the interaction terms were not significant, which indicated that the associations of satiety responsiveness, food enjoyment, and food responsiveness to child BMI z-scores were not moderated by the indulgent or uninvolved feeding styles.

The model predicting emotional eating approached significance ($F_{10,93} = 1.89$; $P = .05$) and accounted for 17% of the variance in BMI z-scores. Significant main effects were not observed in this model for emotional eating or feeding style, but the interaction between uninvolved feeding style and emotional overeating was a significant predictor of BMI z-scores ($B = 2.16$; $P < .05$), which indicated that uninvolved feeding style moderated the association of emotional overeating to BMI z-scores. This significant interaction term accounted for 6% of the total variance in the model. As shown in the Figure, *post hoc* probing indicated that higher levels of emotional overeating were significantly associated with higher BMI z-scores in children whose mothers had an uninvolved feeding style (unstandardized beta coefficient = 2.39; $P < .01$) but not in children of mothers with an authoritarian feeding style (unstandardized beta coefficient = $-.64$; $P = .30$).

Table 2. Mother and Child Sociodemographic Characteristics, BMI, and Maternal Feeding Styles ($n = 104$)

Variable	n (%)	Mean (SD)	Range
Maternal age, y		32.69 (4.50)	23.0–45.0
Maternal race/ethnicity			
Caucasian	93 (89.42)		
Other	11 (10.58)		
Marital status			
Married	92 (88.46)		
Other	12 (11.54)		
Educational attainment ^a			
High school education or some college	27 (26.21)		
College degree, some graduate school, or graduate degree	76 (73.79)		
Total family income			
< \$10,000	4 (3.85)		
\$10,000–29,999	7 (6.73)		
\$30,000–49,999	16 (15.38)		
\$50,000–69,999	24 (23.08)		
\$70,000–79,000	14 (13.46)		
> \$80,000	39 (37.50)		
Maternal BMI, kg/m ²		26.60 (7.17)	17.48–51.57
Child BMI z-score		0.09 (1.63)	–5.05 to 4.98
Child BMI category			
Underweight	11 (10.58)		
Healthy weight	72 (69.23)		
Overweight	12 (11.54)		
Obese	9 (8.65)		
Child gender			
Male	51 (49.04)		
Female	53 (50.96)		
Child age, y		3.78 (0.70)	
CFSQ–Responsiveness		2.81 (0.46)	1.84–3.95
CFSQ–Demandingness		1.19 (0.15)	0.72–1.55
Parent feeding style			
Authoritative	38 (36.54)		
Authoritarian	18 (17.31)		
Indulgent	27 (25.96)		
Uninvolved	21 (20.19)		

BMI = Body Mass Index

CFSQ = Caregiver's Feeding Styles Questionnaire

a. Educational attainment was not reported by 1 participant.

Table 3. Results of Multiple Regression Analyses Predicting BMI z-Score From Child Eating Behaviors and Maternal Feeding Style

Predictors	B	SE	t Test
Model 1: Satiety Responsiveness			
Measured at home vs measured at site	.24	.35	.67
Child sex	−.26	.34	−.76
Race/ethnicity ^a	−.55	.53	−1.05
Maternal BMI	.04	.02	1.72
Satiety responsiveness	−.78	.32	−2.43*
Authoritarian	.14	.46	.31
Indulgent	−.05	.48	−.10
Uninvolved	−.18	.54	−.35
Indulgent × satiety responsiveness	.03	.86	.04
Uninvolved × satiety responsiveness	.10	.81	.12
Model summary	F _{10,93} = 1.44; P = .17; R ² = 0.13		
Model 2: Food Enjoyment			
Measured at home vs measured at site	.41	.35	1.16
Child sex	−.22	.34	−.64
Race/ethnicity	−.37	.52	−.71
Maternal BMI	.04	.02	1.84
Food enjoyment	.62	.22	2.88**
Authoritarian	.04	.45	.10
Indulgent	−.33	.50	−.67
Uninvolved	−.32	.51	−.62
Indulgent × food enjoyment	.41	.57	.72
Uninvolved × food enjoyment	.32	.53	.61
Model summary	F _{10,93} = 1.76; P = .08; R ² = 0.16		
Model 3: Food Responsiveness			
Measured at home vs measured at site	.32	.36	.86
Child sex	−.21	.35	−.59
Race/ethnicity	−.20	.53	−.37
Maternal BMI	.04	.02	1.79
Food responsiveness	.49	.22	2.19*
Authoritarian	−.16	.46	−.34
Indulgent	.02	.50	.04
Uninvolved	−.31	.53	−.58
Indulgent × food responsiveness	.17	.57	.30
Uninvolved × food responsiveness	.54 .55 .97		
Model summary	F _{10,91} = 1.43; P = .18; R ² = 0.14		
Model 4: Emotional Overeating			
Measured at home vs measured at site	.27	.35	.78
Child sex	−.42	.35	−1.22
Race/ethnicity	−.23	.51	−.42
Maternal BMI	.05	.02	2.15*
Emotional overeating	.43	.33	1.29
Authoritarian	.10	.45	−.22
Indulgent	−.03	.48	−.06
Uninvolved	.08	.49	.16
Indulgent × emotional overeating	−.87	.73	−1.18
Uninvolved × emotional overeating	2.16	.87	2.49*
Model summary	F _{10,93} = 1.89; P = .05; R ² = 0.17		

B, unstandardized beta coefficient; BMI, body mass index; R^2 , multivariate coefficient.

a. 0 = white, 1 = minority race/ethnicity; * $P < .05$; ** $P < .01$

Adjusted R^2 values are reported. Authoritative feeding style is the comparison group for authoritarian, indulgent, and uninvolved feeding styles.

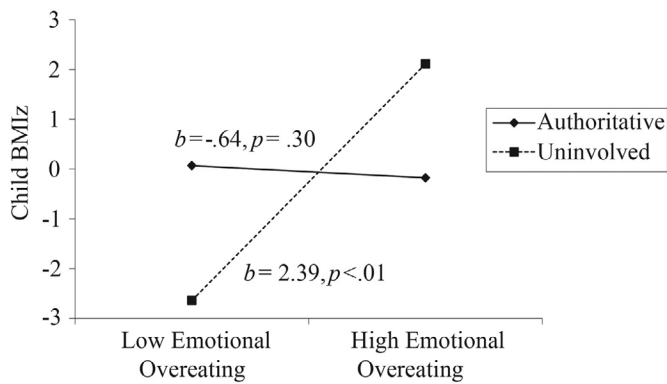


Figure 1. Relation between emotional overeating, uninvolved feeding style, and child BMI z-scores. Higher levels of emotional overeating are associated with higher child BMI z-scores in the presence of an uninvolved feeding style.

Discussion

The aims of this study were to examine the relation between BMI *z-scores* and preschoolers' eating behaviors and to test the moderating role of permissive parent feeding styles in these associations. Previous research documented emotional eating as a risk factor for excessive weight gain and obesity; however, the current findings in a preschool-aged sample suggested a link between overeating in response to negative emotions and higher BMI only in the presence of an uninvolved maternal feeding style. This pattern of findings suggested that there may be an evolution of the association with age, such that for most individuals emotional eating does not adversely influence weight outcomes until later in the life course. The exception suggested by the interaction finding pertained to preschoolers residing with a caregiver who demonstrates an uninvolved feeding style. In this context, high levels of emotional overeating were related to preschoolers having a higher BMI *z-score*. An uninvolved feeding style may increase a young child's risk for obesity by allowing them increased access to calorie-dense foods and by creating an environment conducive to the development of poor emotion regulation skills. A study examining the characteristics of mothers with various feeding styles found that not only were mothers with an uninvolved feeding style less likely to create a food environment that was structured and supportive, they also had lower levels of nurturance, organization, and consistency in discipline.⁹ These parenting characteristics contribute to the development of poor emotion regulation skills in children,²⁶ skills deficits that were linked to emotional eating.²⁷⁻²⁹ Given evidence that children of parents with an uninvolved feeding style also have poorer diets compared with children of parents with other feeding styles,¹⁷ it is possible that higher BMI *z-scores* results from the combination of a child's exposure to a feeding style that enhances access to calorie-dense foods and the tendency to overeat in response to negative emotions. Additional research testing this hypothesis is needed to better understand young children's emotions and dietary patterns in the context of the uninvolved parent feeding style.

This study tested parent feeding style as a moderator of the association between child eating behaviors and weight status. Contrary to expectations, the researchers found no evidence for a moderating effect of feeding style when examining relations of satiety responsiveness, food enjoyment, and food responsiveness to children's BMI *z-scores*. However, children with lower satiety responsiveness and higher food enjoyment and food responsiveness had higher BMI *z-scores*. These associations were consistent with results from other studies investigating links between children's eating behaviors and weight outcomes,^{6,30} and highlighted the role of self-regulatory aspects of children's eating behaviors in the development of healthy weight in early childhood.

This was a cross-sectional study that relied on mothers' report to assess key study variables. As such, the directionality of the associations observed cannot be inferred and there was the possibility of reporter bias in the measurement of feeding style and child eating behaviors. Moreover, although the participating mothers identified as their child's primary caregiver, the extent to which they were responsible for feeding decisions and eating practices within the family was not determined. Other caregivers' feeding practices (e.g., child's other parent, child care providers) may have had an important role in children's BMI *z-scores* and may merit consideration in future research. A third limitation is that child BMI *z-scores* were determined based on mother-reported child height and weight rather than objectively measured values for 26 participants, which may have been a source of measurement error. Mothers were asked to weigh and measure their child before participating in the study, to minimize bias in weight estimation; however, 10.6% of the sample was classified as underweight, which is higher than the rate reported in national samples. This result is consistent with research demonstrating that mothers are more likely to underestimate their children's weight than to overestimate it.³¹ Fourth, although parenting styles have been shown to be relatively stable over time,³² the lack of longitudinal data on parent feeding styles inhibited the ability to determine whether mothers' reports of their feeding style captured in the current study truly reflected their feeding styles over time. This cross-sectional sample was also relatively homogeneous with respect to participants' sociodemographic characteristics. Use of larger and more diverse samples would allow for an examination of more nuanced between-group differences. Fifth, the CFSQ was originally developed to measure feeding style in low-income racial/ethnic minority parents, and the psychometric properties of this measure in the current study population have not been established. Finally, although the results were statistically significant, the variance accounted for in the models was low, which suggested that other factors were involved in determining children's BMI *z-scores*. Owing to these limitations, readers should interpret these study findings with caution.

Implications for Research and Practice

The findings from this study demonstrate the importance of self-regulatory aspects of eating behavior in maintaining a healthy weight in a sample of primarily white preschoolers. Assessing these eating behaviors in preschoolers could provide clinically relevant information regarding children's risk

for excessive weight gain during early childhood, a critical time for obesity prevention. In addition, because children's eating behavior becomes increasingly determined by social and environmental factors and less influenced by internal self-regulatory mechanisms during the preschool years,^{33,34} developing and implementing strategies to help children retain their naturally occurring appetite regulation abilities is critical for preventing overweight and obesity. Another important topic for future research is how the association between emotional eating and weight outcomes in children changes over time. Although the researchers did not detect a relationship between emotional eating and BMI z-scores in this preschool sample, emotional eating has consistently been shown to be a risk factor for excessive weight gain and obesity in adolescents and adults. Prospective longitudinal studies are needed to elucidate how this risk process operates across development.

Although feeding style has consistently been linked with children's eating behaviors and weight outcomes in racial/ethnic minority and/or low-income populations,^{14,15,30} associations between children's BMI z-scores and mothers' feeding style in this sample of primarily white and relatively economically advantaged families were not observed. Additional research is needed to determine whether targeting changes in parent feeding style is an effective strategy for promoting healthy weight in non-minority children from moderate or higher-income families. One exception to this recommendation is relevant to nutrition educators working at the individual level to promote healthy weight in preschoolers who demonstrate the tendency to overeat when they experience negative emotions. In this circumstance, evaluating mothers' feeding style is recommended, because the presence of an uninvolved feeding style may reveal a need to make changes in the home food environment to facilitate optimal child nutrition and the maintenance of a healthy weight, such as increasing the availability of healthy food options and making high-fat, high-caloric snack foods less accessible to children. In addition, it may be beneficial to examine parenting behaviors more broadly to determine whether general parenting interventions are needed, such as those designed to improve parental nurturance or consistency.

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